What is claimed is:

1. An intrinsically conducting polymer (ICP) blend obtainable by adding:

   a. a mixture of poly (3,5-ethylenedioxythiophene) and poly(4-styrenesulphonate) (i.e. PEDOT/PSS);

   to

   b. a copolymer of vinylacetate and ethylene

to thereby form the intrinsically conducting polymer (ICP) blend.

2. An intrinsically conducting polymer (ICP) blend according to claim 1, wherein the viscosity of the PEDOT/PSS is about 60 to about 100 mPa.s.

3. An intrinisically conducting polymer (ICP) blend according to claim 1, wherein the amount of PSS present is in excess of the amount of PEDOT.

4. An intrinsically conducting polymer (ICP) according to claim 1, wherein the particle size of the vinylacetate:ethylene mixture is about 0.1 – 10 microns, 0.1 – 5 microns, 0.3 – 3.0 microns or about 0.3 – 1.2 microns.

5. An intrinsically conducting polymer (ICP) according to claim 1, wherein the viscosity of the vinylacetate:ethylene copolymer is about 1,000 – 40,000 mPa.s, about 1 – 20,000 mPa.s, about 14,000 mPa.s or about 2,500 mPa.s.

6. An intrinsically conducting polymer (ICP) according to claim 1, wherein the vinylacetate:ethylene copolymer mixture is acidic and has a pH of about 2 – 6, about 3 – 5 or about 4.25.

7. An intrinsically conducting polymer (ICP) according to claim 1, wherein prior to mixing the PEDOT/PSS and the copolymer of vinylacetate and ethylene, the PEDOT/PSS is mixed with an acid such as a carboxylic acid.

8. An intrinsically conducting polymer (ICP) according to claim 7, wherein the carboxylic acid is selected from any $C_1 - C_{20}$ carboxylic acid, or combination thereof.

9. An intrinsically conducting polymer (ICP) according to claim 1, wherein the ICP formed by mixing the PEDOT/PSS and the copolymer of vinylacetate and ethylene forms a substantially homogenous blend.

10. A coated product wherein the coated product comprises a substrate with a coating of an intrinsically conducting polymer (ICP) blend comprising PEDOT/PSS and a copolymer of vinylacetate and ethylene according to claim 1.

11. A coated product according to claim 10, wherein the substrate is man made such as cellulose acetate, polypropylene, nylon or a biopolymer produced from renewable resources such as poly-lactic acid, poly-glycollic acid, or any copolymer thereof.

12. A coated product according to claim 10, wherein the resistance of a coated part of the coated substrate may be about 0.1 to 500 k-ohm.

13. A coated product according to claim 10, wherein the coated substrate is treated with a metal salt solution dissolved in aqueous acid.

14. A coated product according to claim 10, wherein the coated substrate is treated with a metal salt solution dissolved in aqueous acid and the aqueous acid is a short chain carboxylic acid such as formic acid.

15. A coated product according to claim 10, wherein the coated substrate is treated with a metal salt solution dissolved in aqueous acid and the treated coated substrate is then rinsed successively with water to remove excess salt, followed by ethanol and acetone.

16. A coated product according to claim 10, wherein treating the coated substrate with a metal salt solution dissolved in aqueous acid has the effect of 'fine tuning' the surface and decreases the surface resistance to about less than 5 k-ohms, less than 1 k-ohms or less than about 0.5 k-ohms.

17. An electrode comprising a coated substrate wherein the coating of the coated substrate is an intrinsically conducting polymer (ICP) blend comprising PEDOT/PSS and a copolymer of vinylacetate and ethylene according to claim 1.

18. Use of an electrode according to claim 17 in dental apparatus for the detection of caries.

19. Use of an electrode according to claim 17 as a thin, intermediate layer between an anode and a light emitting layer of organic polymers wherein the PEDOT/PSS copolymer blends polarise the otherwise rough ITO surface for subsequent organic layer deposition and increase the anode work function, thus facilitating hole injection.

20. Use of an electrode according to claim 17 as a thin, intermediate layer between an anode of indium-tin oxide (ITO) and a light emitting layer of organic polymers wherein the PEDOT/PSS copolymer blends polarise the otherwise rough ITO surface for subsequent organic layer deposition and increase the anode work function, thus facilitating hole injection.